

Water Distribution

Dam Aerator

Lake Grapevine aerator was put into operation in early 1985 and is in operation 7 days a week, 24 hours per day. The purpose of the aerator is to destratify (turn over) the lake to reduce odor, iron and manganese. The most common result of destratification is an improvement in dissolved oxygen levels and consequent benefits on warm water fish and water supply quality.

The result of destratification in Lake Grapevine is an improved drinking water quality. Under anoxic (without oxygen, anaerobic) conditions, lake bottom sediments release metals (iron and manganese) and gases (hydrogen sulfide) that can cause taste and odor problems in drinking water. When the bottom waters of a thermally stratified lake are eliminated, these problems are abolished or greatly reduced. Water treatment costs also decrease because fewer chemicals are required.